Application No. 10/735,926 Docket No.: OMY-0034 (80276-0034)

AMENDMENTS TO THE CLAIMS

- 1. 30. (Canceled)
- 31. (Currently Amended) A substrate processing apparatus, comprising:

 resist solution supplying means for supplying a resist;

 affinitive material supplying means for supplying an affinitive material, the affinitive material being affinitive with a developing solution;

mixing means for mixing the resist supplied from the resist solution supplying means and the affinitive material supplied from the affinitive material supplying means, to obtain a mixed resist;

resist film forming means for coating a-the mixed resist on a substrate so as to form a mixed resist film thereon; and

controlling means for controlling a distribution of a dissolving characteristic of the <u>mixed</u> resist against a-the developing solution used for developing the <u>mixed</u> resist in a direction of a thickness of the <u>mixed</u> resist film such that the resist-includes an uneasily-dissolvable layer on a front side and an easily dissolvable layer on a rear side, prior to developing the substrate to which the <u>mixed</u> resist is coated.

32. (Currently Amended) The substrate processing apparatus as set forth in claim 31, wherein the resist film forming means coats on the substrate a resist that contains a material having an affinity against the developing solution used for the developing process, and

wherein the controlling means performs a predetermined process for the <u>mixed</u> resist coated on the substrate so as to nonuniformly distribute the material in the direction of the thickness of the <u>mixed</u> resist film.

33. (Previously Presented) The substrate processing apparatus as set forth in claim32,

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wherein the predetermined process has at least one of a heating process and a pressure reducing process.

- 34. (Currently Amended) The substrate processing apparatus as set forth in claim 31, wherein the controlling means supplies the developing solution used for the developing process to the <u>mixed</u> resist coated on the substrate.
- 35. (Withdrawn) A substrate processing method which uses the apparatus according to claim 31, comprising:
 - (a) coating a resist on a substrate so as to form a resist film thereon;
- (b) controlling a distribution of a dissolving characteristic of the resist against a developing solution used for developing the resist in a direction of a thickness of the resist film such that the resist includes an uneasily-dissolvable layer on a front side and an easily-dissolvable layer on a rear side, prior to developing the substrate to which the resist is coated.
- 36. (Withdrawn) The substrate processing method as set forth in claim 35, wherein the step (a) has the step of coating on the substrate a resist that contains a material having an affinity against the developing solution used for the developing process *r* and

wherein the step (b) has the step of performing a predetermined process for the resist coated on the substrate so as to nonuniformly distribute the material in the direction of the thickness of the resist film.

- 37. (Withdrawn) The substrate processing method as set forth in claim 36, wherein the predetermined process has at least one of a heating process and a pressure reducing process.
- 38. (Withdrawn) The substrate processing method as set forth in claim 35,

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wherein the step (b) has the step of supplying the developing solution used for the developing process to the resist coated on the substrate.